1/30 **FIG. 1**

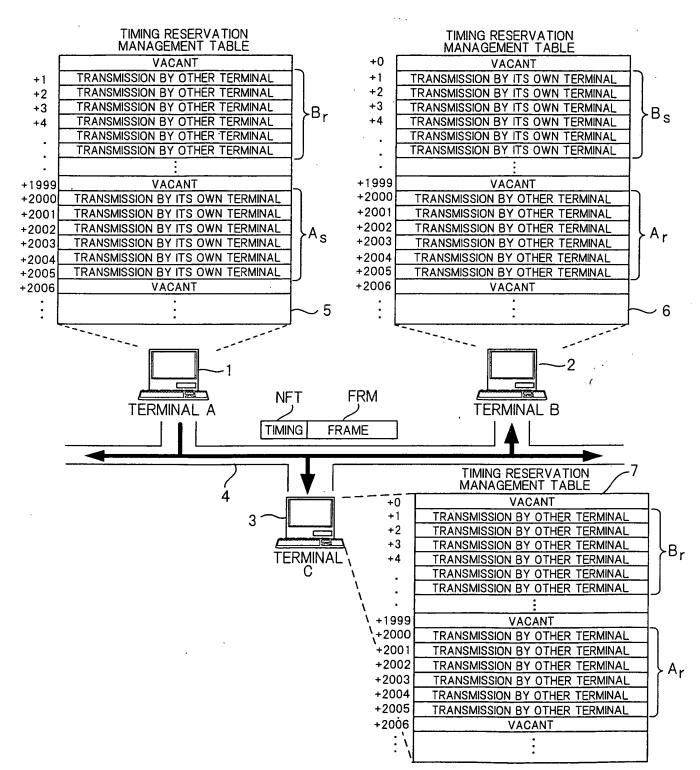
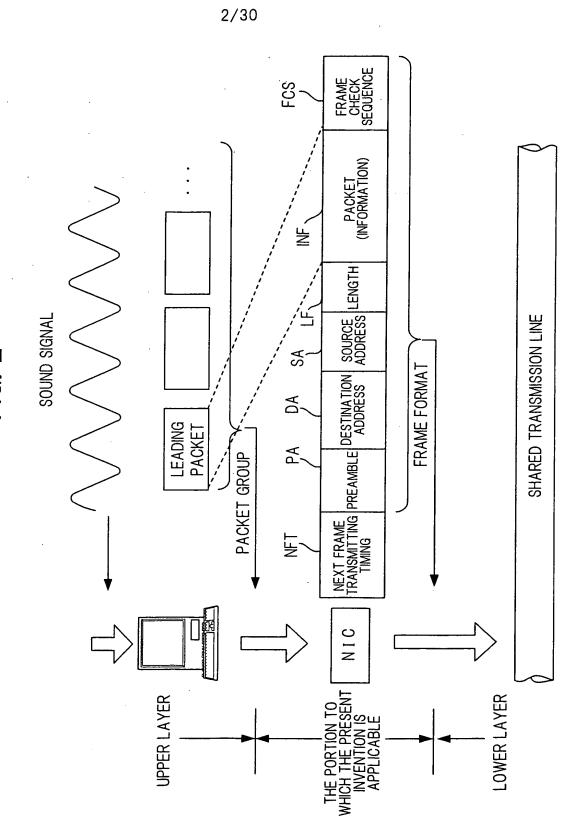
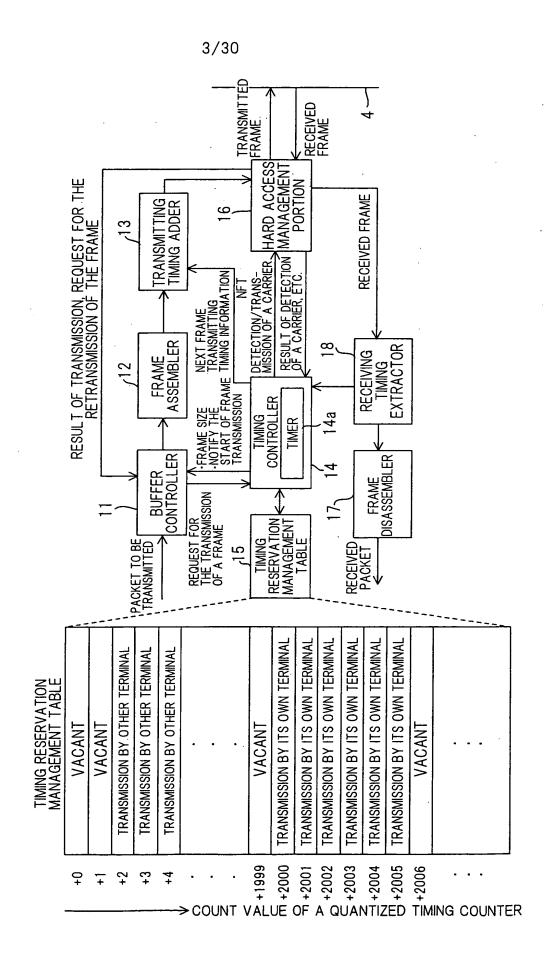


FIG. 2



F1G. 3



^{4/30} *FIG. 4*

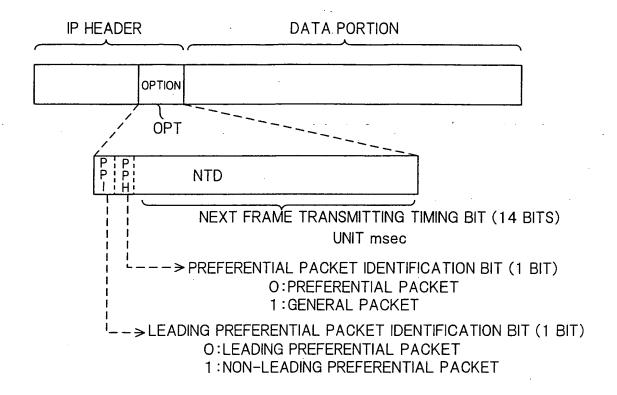
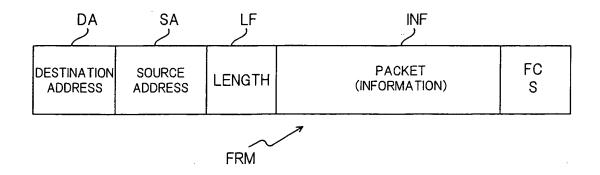


FIG. 5



5/30 **FIG. 6A**

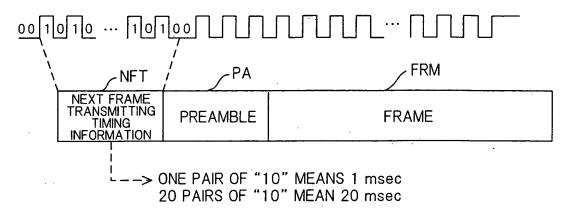
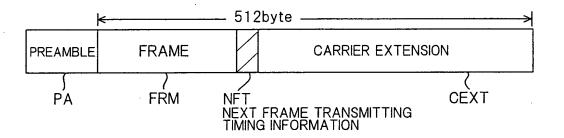
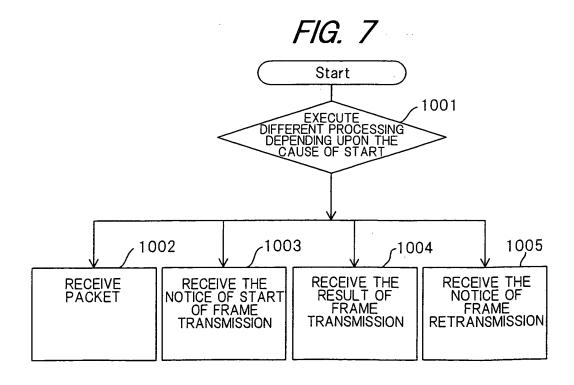
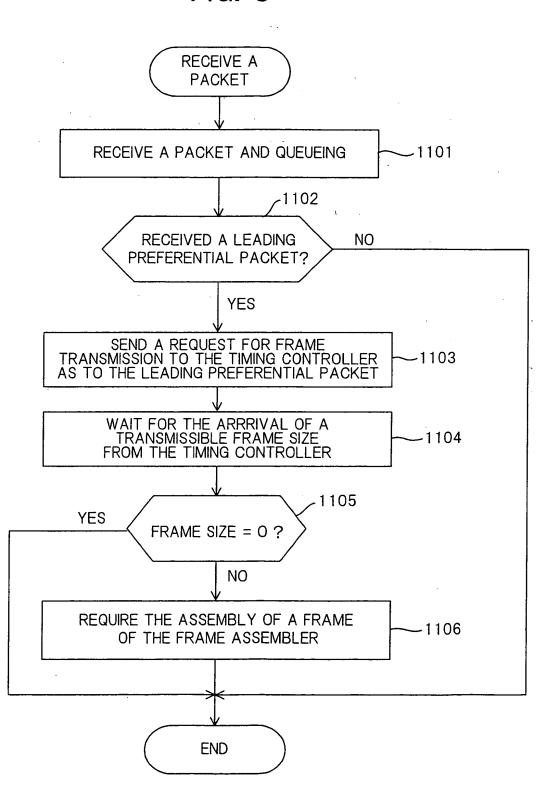


FIG. 6B



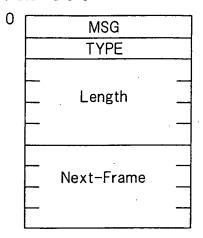


6/30 **FIG. 8**



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FIG. 9A



MSG: MESSAGE TYPE

01: REQUEST FOR FRAME TRANSMISSION

TYPE: FRAME TYPE

01: PREFERENTIAL FRAME (LEADING)

02: PREFERENTIAL FRAME (NON-LEADING)

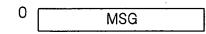
03: GENERAL FRAME

Length: TRANSMISSION FRAME SIZE

Next-Frame: NEXT FRAME TRANSMITTING TIMING

(msec)

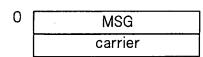
FIG. 9B



MSG: MESSAGE TYPE

OF: REQUEST FOR CARRIER

FIG. 9C



MSG: MESSAGE TYPE

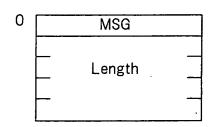
10: NOTICE OF CARRIER

carrier:

01 CARRIER

02 NO CARRIER

FIG. 9D

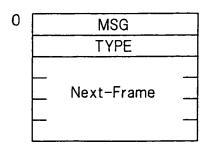


MSG: MESSAGE TYPE

02: TRANSMISSIBLE

Length: TRANSMISSIBLE FRAME SIZE

FIG. 9E



MSG: MESSAGE TYPE

03: TRANSMITTING TIMING

TYPE: FRAME TYPE

01: PREFERENTIAL FRAME (LEADING)

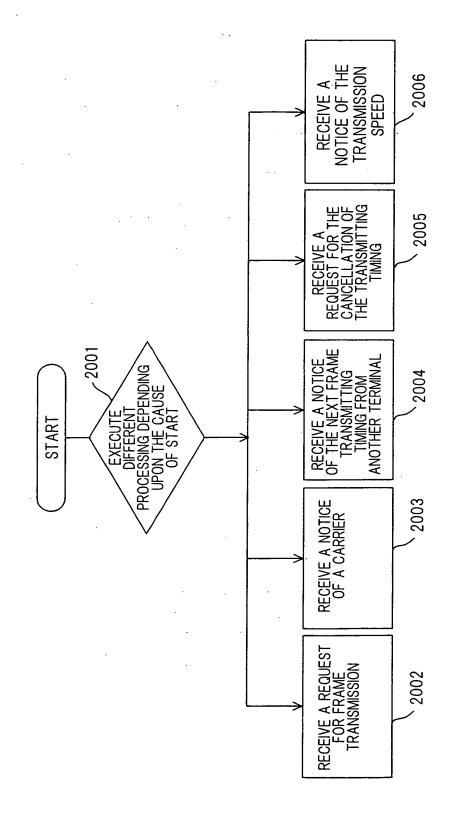
02: PREFERENTIAL FRAME (NON-LEADING)

03: GENERAL FRAME

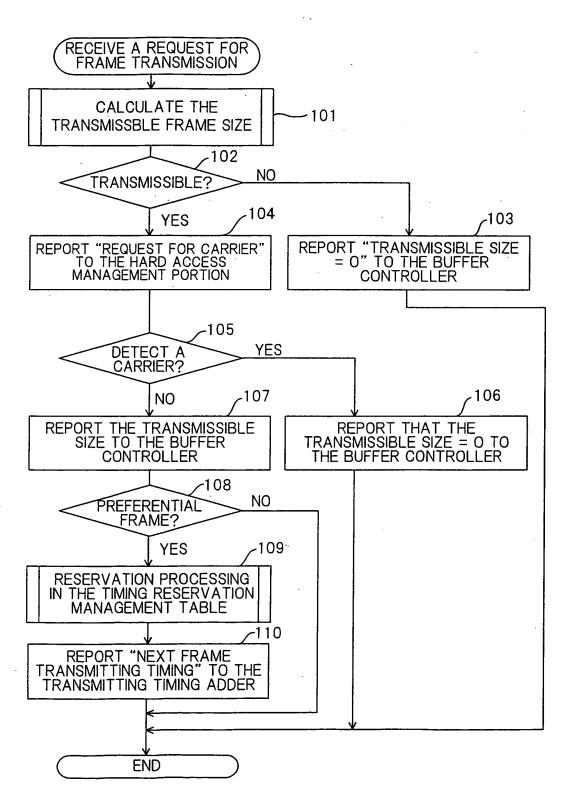
Next-Frame: NEXT FRAME TRANSMITTING TIMING

(msec)

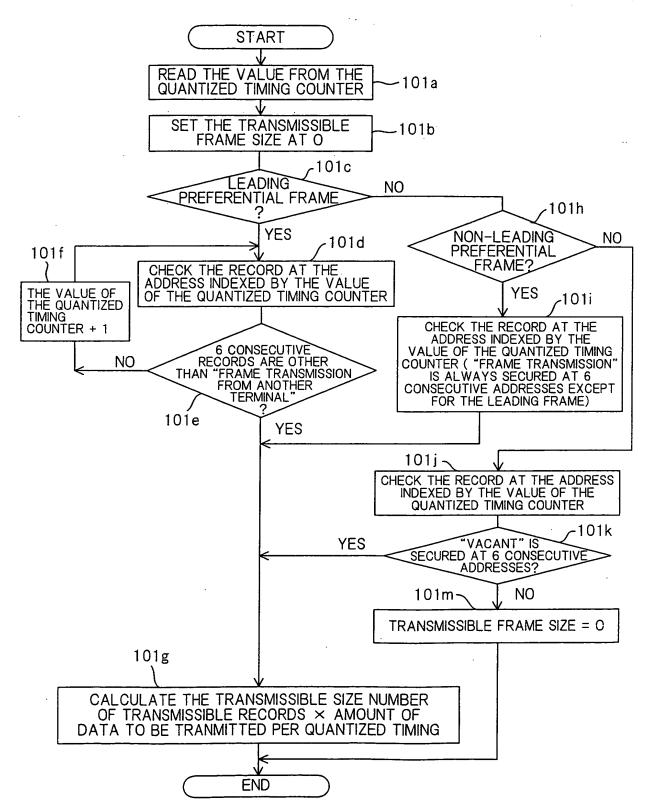
FIG. 10



9/30 **FIG. 11**



10/30 **FIG. 12**



11/30 **FIG. 13**

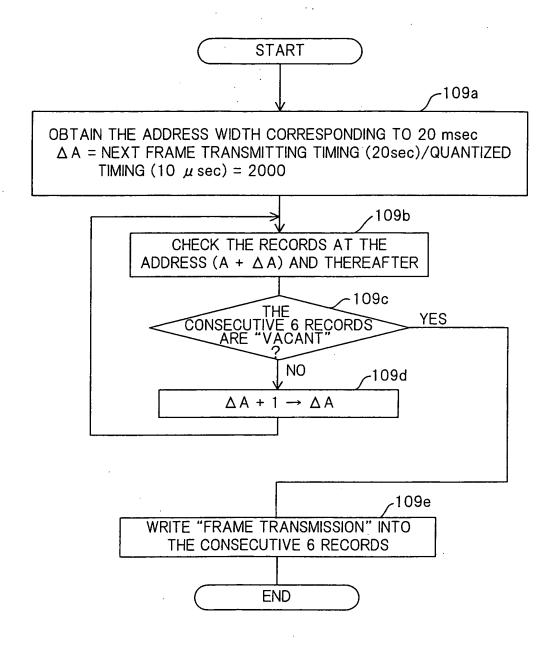


FIG. 14A

0 MSG **TYPE** Length

MSG: MESSAGE TYPE

04: FRAME ASSEMBLY

TYPE: FRAME TYPE

01: PREFERENTIAL FRAME (LEADING) 02: PREFERENTIAL FRAME (NON-LEADING)

03: GENERAL FRAME

Length: SIZE OF FRAME TO BE TRANSMITTED

FIG. 14B

0 MSG **TYPE**

MSG: MESSAGE TYPE

05: END OF FRAME ASSEMBLY

TYPE: FRAME TYPE

01: PREFERENTIAL FRAME (LEADING)

02: PREFERENTIAL FRAME (NON-LEADING)

03: GENERAL FRAME

FIG. 14C

0 MSG **TYPE** Next-Frame

MSG: MESSAGE TYPE

06: REQUEST FOR THE TRANSMISSION OF FRAME

TYPE: FRAME TYPE

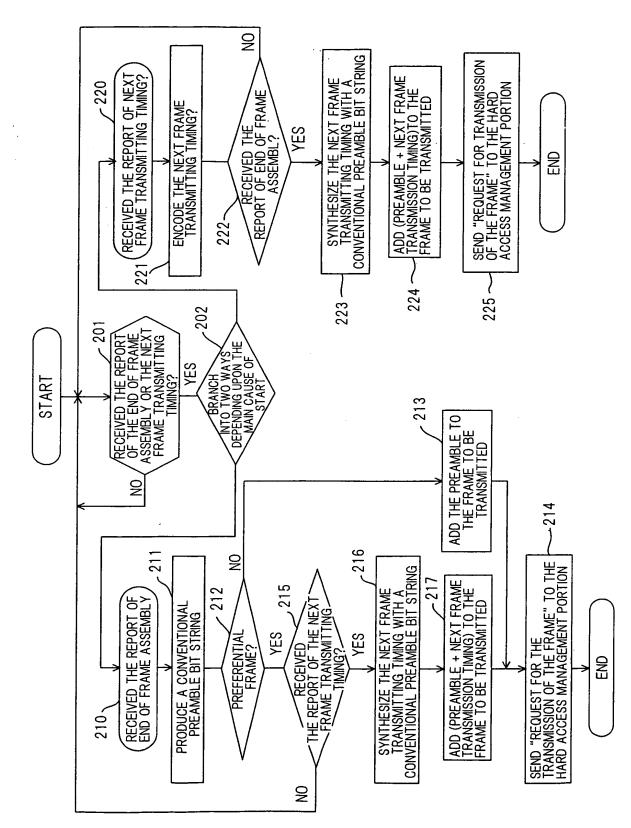
01: PREFERENTIAL FRAME (LEADING)

02: PREFERENTIAL FRAME (NON-LEADING)

03: GENERAL FRAME

Next-Frame: NEXT FRAME TRANMITTING TIMING

FIG. 15



13/30

9

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FIG. 17A

0 MSG Status MSG: MESSAGE TYPE

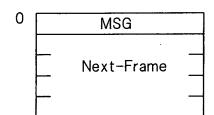
OB: REPORT THE RESULT OF FRAME TRANSMISSION

Status: TRANSMISSION STATUS

01: NORMAL TRANSMISSION IS FINISHED

02: A COLLISION IS DETECTED

FIG. 17B



MSG: MESSAGE TYPE

OA: REQUEST FOR CANCELLATION OF TRANSMITTING TIMING

Next-Frame: NEXT FRAME TRANMITTING TIMING

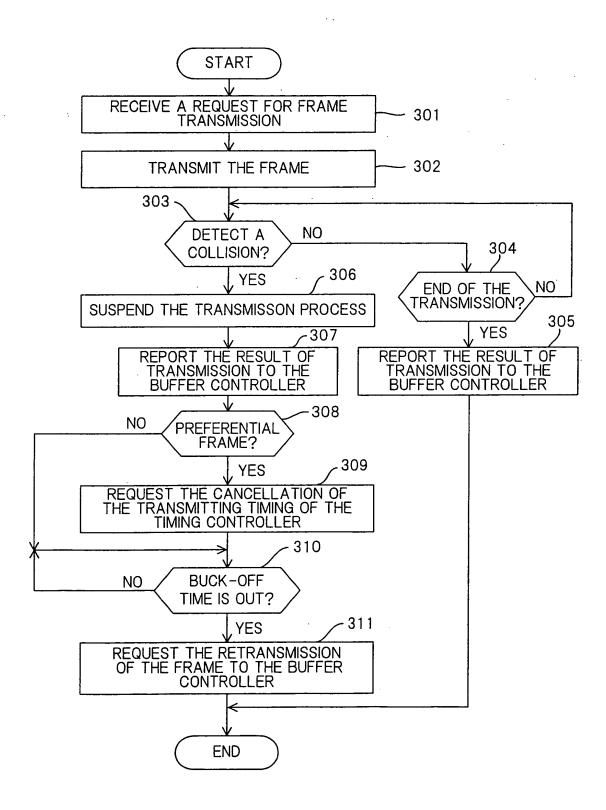
FIG. 17C

MSG

MSG: MESSAGE TYPE

OC: REQUEST FOR RETRANSMISSION OF FRAME

16/30 **FIG. 18**



17/30 **FIG. 19**

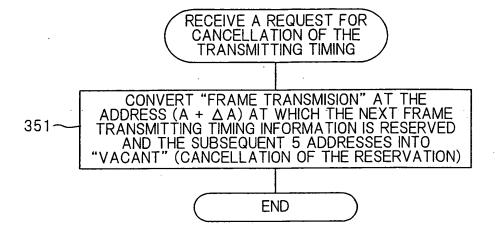
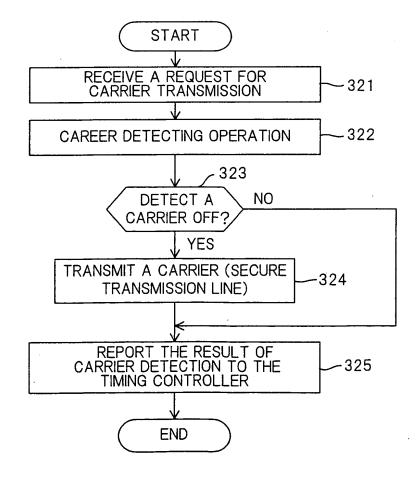
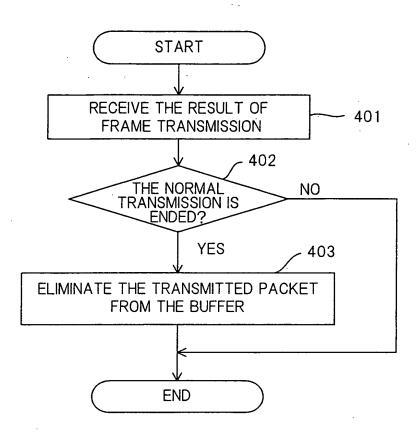


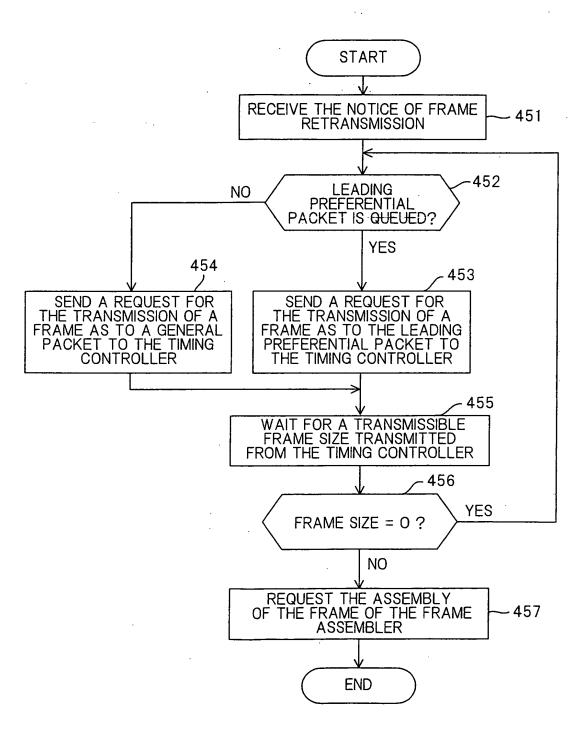
FIG. 20



18/30 **FIG. 21**



19/30 **FIG. 22**



^{20/30} *FIG. 23*

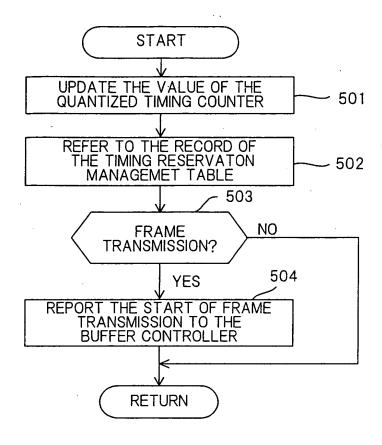
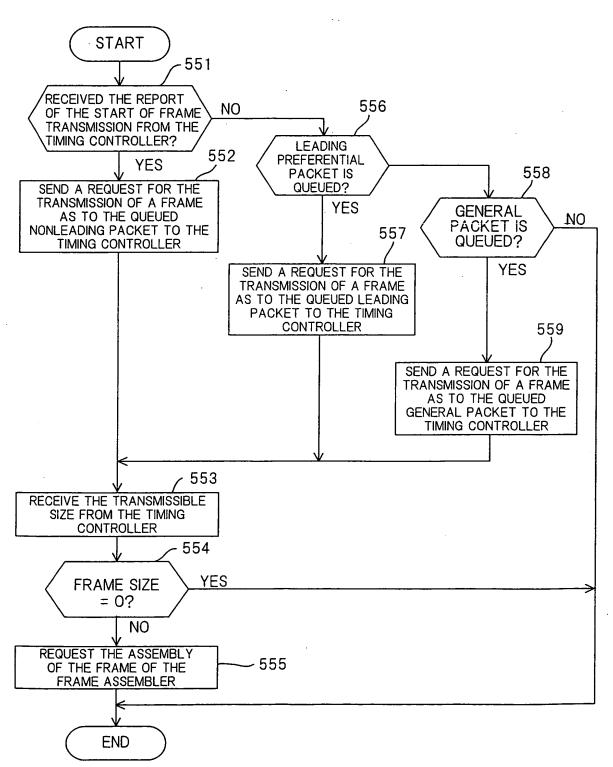


FIG. 24

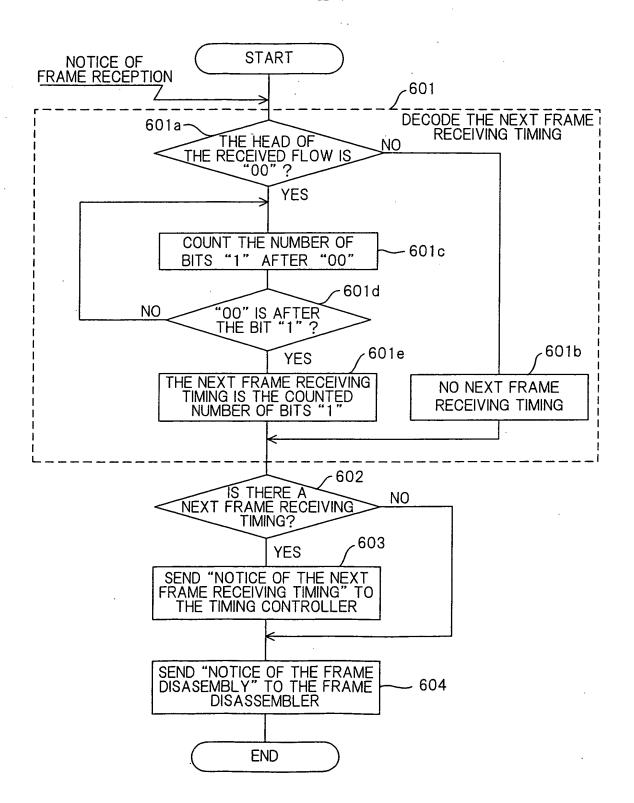
MSG: MESSAGE TYPE

OD: REPORT OF THE START OF FRAME TRANSMISSION

21/30 FIG. 25



22/30 FIG. 26



23/30

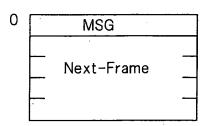
FIG. 27A

0 MSG

MSG: MESSAGE TYPE

07: RECEIVE FRAME

FIG. 27B



MSG: MESSAGE TYPE

08: RECEIVE TIMING

Next-Frame: NEXT FRAME RECEIVING TIMING

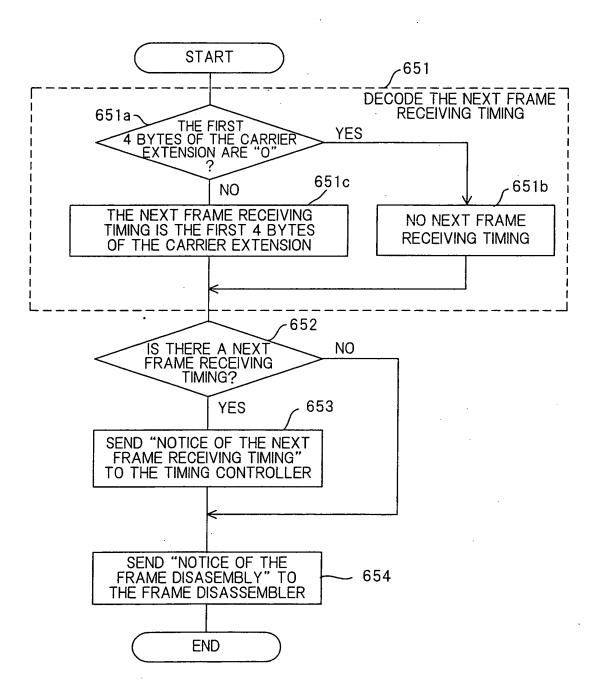
FIG. 27C

0 MSG

MSG: MESSAGE TYPE

09: REQEUST FOR FRAME DISASSEMBLY

24/30 FIG. 28



^{25/30} *FIG. 29*

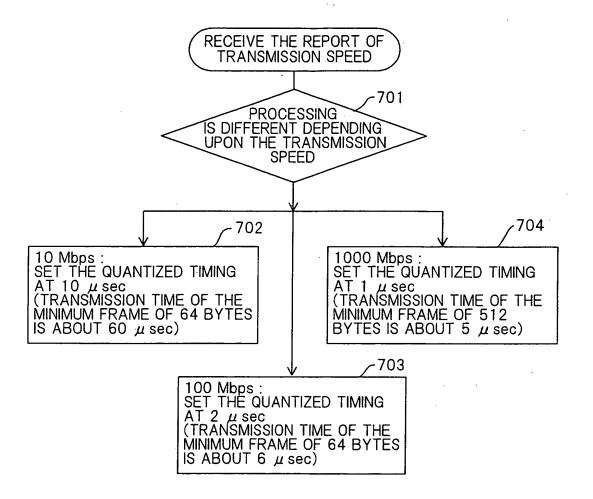


FIG. 30

MSG Speed

MSG: MESSAGE TYPE

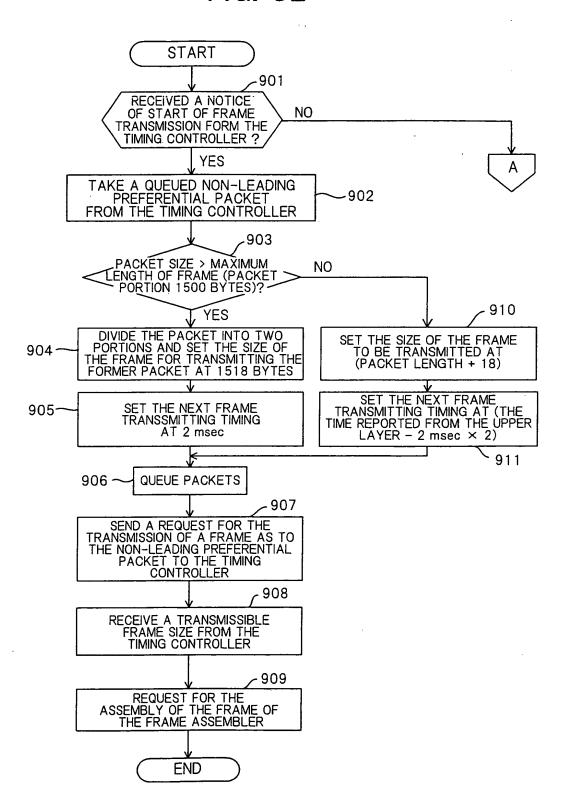
OE: REPORT OF TRANSMISSION SPEED

Speed: 01 10Mbps

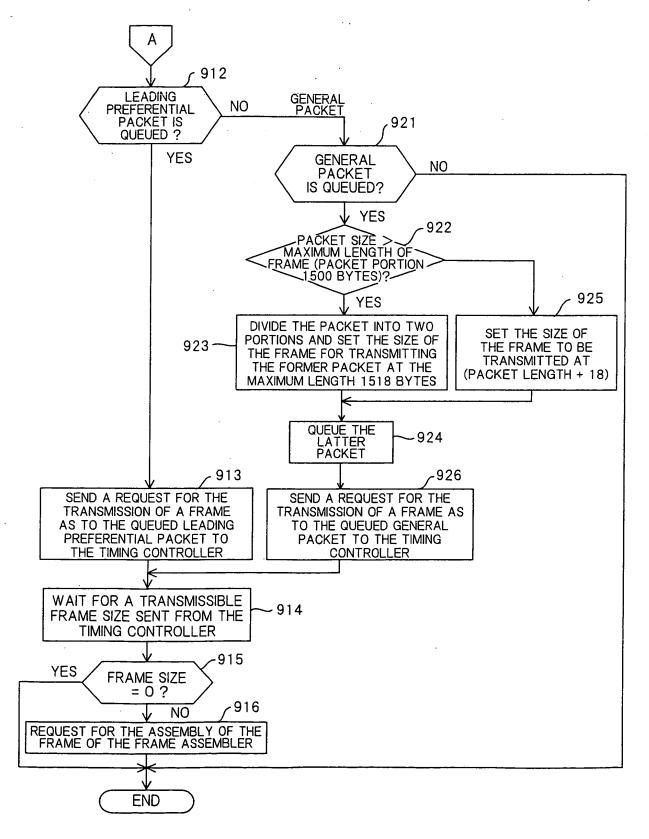
02 100Mbps 03 1000Mbps

26/30 FIG. 31 RECEIVE A PACKET 801-NO PREFERENTIAL PACKET? 803 YES 802 QUEUE NO LEADING PACKET **PACKETS** YES 804 --PACKET SIZE >MAXIMUM FRAME LENGTH -(PACKET PORTION 1500 NO BYTES)?_ 813 DIVIDE THE PACKET INTO TWO
PORTIONS AND SET THE SIZE OF THE
FRAME FOR TRANSMITTING THE SET THE SIZE OF THE FRAME TO BE TRANSMITTED AT (PACKET LENGTH + 18) 805 -FORMER PACKET AT 1518 BYTES SET THE NEXT FRAME TRANSSMITTING TIMING AT 2 msec SET THE TIME REPORTED 806 FROM THE UPPER LAYER AS THE NEXT FRAME TRANSMITTING TIMING SET THE LATTER PACKET AS NON-LEADING PACKET 807 -814 815 - 808 QUEUE PACKETS PACKET SIZE MAXIMUM LENGTH OF FRAME (PACKET PORTION-1500 BYTES)? NO 809 SEND A REQUEST FOR THE TRANSMISSION OF A FRAME AS 818 TO THE LEADING PREFERENTIAL PACKET TO THE TIMING CONTROLLER 816 YES DIVIDE THE PACKET INTO TWO SET THE SIZE OF THE FRAME TO BE TRANSMITTED AT (PACKET LENGTH + 18) PORTIONS AND SET THE - 810 SIZE OF THE FRAME FOR TRANSMITTING THE FORMER WAIT FOR A TRANSMISSIBLE FRAME SIZE SENT FROM THE TIMING CONTROLLER PACKET AT THE MAXIMUM LENGTH 1518 BYTES 811 YES FRAME SIZE QUEUE PACKETS - 817 = 0 ? NO - 812 REQUEST THE ASSEMBLY OF THE FRAME OF THE FRAME ASSEMBLER END

^{27/30} *FIG. 32*



28/30 **FIG. 33**



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FIG. 34 PRIOR ART

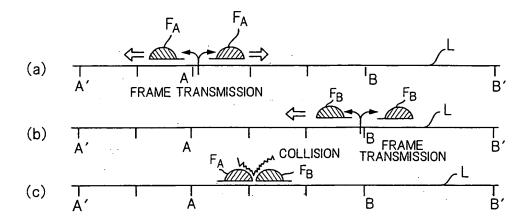


FIG. 35 PRIOR ART

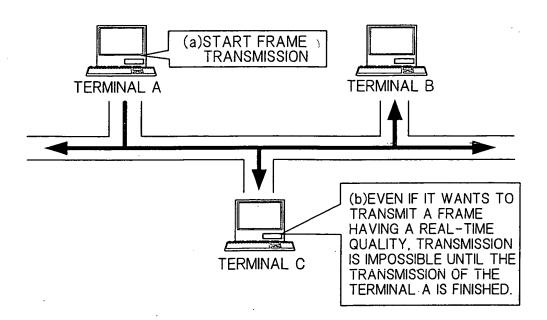


FIG. 36 PRIOR ART

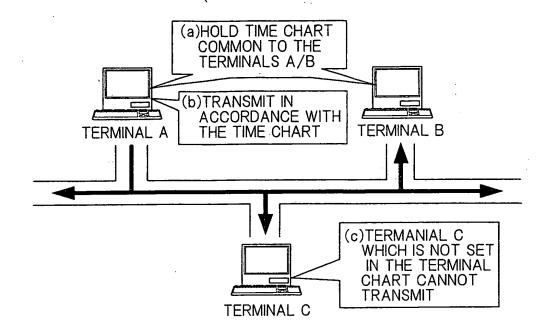


FIG. 37 PRIOR ART

TRANSMISSION FROM TERMINAL A	TRANSMISSION FROM TERMINAL B	TRANSMISSION FROM TERMINAL A	TRANSMISSION FROM TERMINAL B	 TRANSMISSION FROM TERMINAL A	TRANSMISSION FROM TERMINAL B	· •••	
						(T	IME t)